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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,330	02/15/2002	Francois Martin	PHFR 010018	2010
24737	7590	04/04/2006	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			TRAN, KHANH C	
			ART UNIT	PAPER NUMBER
			2611	

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/076,330

Applicant(s)

MARTIN, FRANCOIS

Examiner

Khanh Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The Amendment filed on 11/29/2005 has been entered. Claims 1-16 are pending in this Office action.

Response to Arguments

2. Applicant's arguments, see pages 3-6, filed on 11/29/2005, with respect to the rejection(s) of claim(s) 1-16 under 35 U.S.C 103 (a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Rosengren et al. U.S. Patent 5,633,683. See full explanation as shown below.

3. Objection of the Drawings has been withdrawn after Applicant amended the Drawings to include descriptive text labels.

4. Objection of the Abstract of the original disclosure has been withdrawn after Applicants amended the Abstract.

5. Applicant's explanation on the preferred layout for the Specification according to the MPEP has been accepted. The objection of the Specification has been withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-5, 7-9 and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosengren et al. U.S. Patent 5,633,683.

Regarding claim 1, Rosengren et al. invention is directed to a transmitter and method for transmitting video signals.

In column 2, line 60 via column 3 line 25, figure 1 illustrates a transmitter according to the invention. The transmitter may be located at the head-end of a cable network. The transmitter outputs transport stream (TS) according to a group of video signals V1, V2, and V3.

Referring to figure 1, the video signals V1, V2, and V3 are applied to MPEG2 video encoders 2, 3 and 4, corresponding to the claimed first group of coding means, for supplying elementary bit streams E1, E2 and E3.

The video signals V1, V2, and V3 are further applied to a composing circuit 1 which comprises, for each video signal, horizontal and vertical sub-samplers 10, 11 and 12, corresponding to the claimed second group of coding means. Each sub-sampler generates a small-size sub-picture of the respective video picture. The sub-pictures are stored in respective sections of a picture

memory 13 under control of a control circuit 14, which produces mosaic video signal V_m . The video signal V_m is applied to a further MPEG2 encoder 5 for encoding into a further elementary bit stream E_m .

In column 4 line 62 via column 5 line 25, Rosengren et al. teaches that the associated linking data is transmitted by using a descriptor in the program table, wherein the descriptor is a designated mosaic picture. In column 3 lines 20-30, see also figure 1, control circuit 14 is adapted to generate linking data and add linking data L to transport stream TS . Further, in column 1 lines 25-40, the transmitter being adapted to generate a mosaic video signal comprising a plurality of sub-pictures, each sub-picture representing one of said plurality of video signals, generate data linking the position of each sub-picture on a display screen with the program number of the associated video signal, and transmit said mosaic video signal and linking data through said common channel. In light of the aforementioned disclosure, the control circuit 14 corresponds to the claimed associating means.

Figure 1 discloses a multiplexer 6 for multiplexing coded video signals and sub-sample video signals to output a transport stream TS .

Regarding claim 2, claim 2 is rejected on the same ground as for claim 1 because of similar scope. Furthermore, in column 3 lines 35-67, figure 3 illustrates another embodiment of a transmitter. In this embodiment, the video signals to be transmitted (e.g, E_1 , E_2 , E_3 , E_m) are assumed to be already

available. The transmitter receives transport stream TS1, corresponding to the claimed input video signal resulting from the multiplexing of a group of coded video signals, which corresponds to E1, E2, E3 as taught by Rosengren et al..

The associating means and multiplexing means are similar to the discussion of claim 1 rejection.

Regarding claims 3 and 9, claims 3 and 9 are rejected on the same ground as for claim 1 because of similar scope. Furthermore, in column 8, lines 9-35, Rosengren et al. teaches a television receiver for receiving digital video signals, which have been transform-coded into elementary bitstreams, a plurality of bitstreams being multiplexed into transport stream, one of the bitstreams representing a mosaic picture comprising a plurality of sub-pictures, the bitstreams representing a mosaic picture, corresponding to the claimed auxiliary signal. The receiver comprising:

As shown in figure 7, a MOSAIC decoder 47 for receiving the elementary stream Em representing a mosaic picture comprising a plurality of sub-pictures.

In column 8, lines 20-25, user-controlled pointing means for selecting a sub-picture from a displayed mosaic picture. In column 5, lines 40-60, see also figure 8, the microprocessor receives from the remote control unit a request to display the mosaic picture. If the mosaic picture is found to be available, the processor applies the PID of the mosaic elementary video stream to the

demultiplexer. In view of that, the microprocessor corresponds to the claimed means for creating a mosaic.

Further in column 5 lines 50-65, if a mosaic picture is found to be available the processor applies the PID of the mosaic elementary video stream to the demultiplexer. The microprocessor derives the number of sub-pictures from the parameters horizontal_partitioning and vertical_partitioning in the program map table (see Table I). In light of the foregoing, the microprocessor corresponds to the claimed means for creating a database.

Regarding claim 4, referring to figure 8,

demultiplexer 40 demultiplexes the audio A, video V and auxiliary signal Em. Demultiplexer 40 corresponds to the claimed means for de-multiplexing.

As recited in claim 3, decoder 47 for receiving the mosaic stream Em and determining for each macroblock in the elementary stream Em whether it belongs to the sub-picture having the coordinates X, Y. The decoder 47 corresponds to the claimed means for decoding.

As recited in claim 3, the microprocessor receives from the remote control unit a request to display the mosaic picture. If the mosaic picture is found to be available, the processor applies the PID of the mosaic elementary video stream to the demultiplexer. In view of that, the microprocessor corresponds to the claimed means for creating a mosaic. The receiver displays the mosaic picture.

Regarding claim 5, in column 5, lines 40-50, the remote control unit sends a request to display the mosaic picture. The remote control unit corresponds to the claimed request generator.

Regarding claim 7, referring to column 8, lines 20-25, Rosengren et al. further teaches that user-controlled pointing means for selecting a sub-picture from a displayed mosaic picture. The user-controlled pointing means corresponds to the claimed graphical selection means.

Regarding claim 8, in column 6, lines 45-65, the user sends a command to the channel navigation system informing it of the location of the corresponding sub-picture in the mosaic picture. The channel navigation system sends a request to the demultiplexer to select that program. The sub-picture corresponds to the claimed sub-sampled video signal and the program corresponds to the claimed corresponding decoded video signal. In view of that user-controlled pointing means corresponds to the claimed means for selecting a sub-sampled video signal as set forth in the application claim.

Regarding claim 11, claim 11 is rejected on the same ground as for claim 1 because of similar scope.

Regarding claim 12, claim 12 is rejected on the same ground as for claim 2 because of similar scope.

Regarding claim 13, claim 13 is rejected on the same ground as for claim 3 because of similar scope.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosengren et al. U.S. Patent 5,633,683 as applied to claim 1 above, and further in view of Dureau et al. U.S. Patent 6,539,545.

Regarding claim 6, Rosengren et al. does not disclose the user request originates from the content of a user profile comprising a group of fields as claimed in the application claim.

Dureau et al. invention is directed to a system and method for the simultaneous transmission and rendition of multiple encoded digital video signal streams in an interactive television application. In column 13, lines 45-60, in one example, Dureau et

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al. teaches a commercial may include a number of sub-pictures each at fixed display location and the content of each display location would be selected by the end-user and/or by the receiver based on user profile comprising a group of fields. Because the user profile would determine the display location, it would have been obvious for one of ordinary skill in the art at the time of the invention that Rosengren et al. teachings can be modified to include a user profile. Motivation is as taught in Dureau et al. invention recited above.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosengren et al. U.S. Patent 5,633,683 as applied to claim 1 above, and further in view of Ito et al. U.S. Patent 6,377,309.

Regarding claim 10, claim 10 is rejected on the same ground as for claim 1 because of similar scope. Rosengren et al., however, does not teach the sub-pictures are coded in accordance with MPEG4-standard.

In column 3, lines 40-60, Ito et al. teaches in one embodiment that main information of TV broadcast is sent by efficiently multiplexing sound data including image and/or sound data in a predetermined field in the main information as sub information, and the receiving side receives and reproduces the main information and sub-information. As the data formats of the main information and sub-information, main information uses an MPEG2 data stream of digital TV broadcast, and the sub information uses an MPEG4 data stream which has been standardized in recent years and has very high transmission efficiency. Because the sub-pictures, representative of

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the mosaic picture, are sub-information, it would have been obvious for one of ordinary skill in the art at the time of the invention that Rosengren et al. teachings can be modified to encode the sub-pictures in accordance with MPEG4 data stream. MPEG4-standard is inherently a highly compression video algorithm. One of ordinary skill in the art would have recognized that sub-information could be compressed to occupy lesser transmission bandwidth. Furthermore, Ito et al. teaches that MPEG4 data stream has been standardized in recent years and has very high transmission efficiency.

9. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosengren et al. U.S. Patent 5,633,683

Regarding claim 14, claim 14 is rejected on the same ground as for claim 11 because of similar scope. Furthermore, as common knowledge to one of ordinary skill in the art, an average person in the art of computer programming can write a sequence of program code instructions for executing the steps of the procedure as claimed in claim 11 if the program is executed by a signal processor implemented in the transmitter. Motivation is for testing purposes and simulation.

Regarding claim 15, claim 15 is rejected on the same ground as for claim 12 because of similar scope. Furthermore, as known to one of ordinary skill in the art, an average person in the art of computer programming can write a sequence of program code instructions for executing the steps of the procedure as claimed in claim 12 if the

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program is executed by a signal processor implemented in the transmitter. Motivation is for testing purposes and simulation.

Regarding claim 16, claim 16 is rejected on the same ground as for claim 13 because of similar scope. Furthermore, as known to one of ordinary skill in the art, an average person in the art of computer programming can write a sequence of program code instructions for executing the steps of the procedure as claimed in claim 13 if the program is executed by a signal processor implemented in the transmitter. Motivation is for testing purposes and simulation.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Tran whose telephone number is 571-272-3007. The examiner can normally be reached on Monday - Friday from 08:00 AM - 05:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KCT

Phan Cong Tran
Primary Examiner

03/30/2006